



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE

United States Patent and Trademark Office

Address: COMMISSIONER FOR PATENTS

P.O. Box 1450

Alexandria, Virginia 22313-1450

www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/576,793

11/06/2006

Laurent-Yves Grand

1200.750

5852

<sup>7590</sup>  
BERENATO, WHITE & STAVISH  
6550 ROCK Spring Drive  
Ste., 240  
Bethesda, MD 20817

<sup>12/13/2007</sup>

EXAMINER

COLEMAN, KEITH A

ART UNIT

PAPER NUMBER

4175

MAIL DATE

DELIVERY MODE

12/13/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

# Office Action Summary

**Application No.**

10/576,793

**Applicant(s)**

GRAND ET AL.

**Examiner**

Keith A. Coleman

**Art Unit**

4175

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
- Paper No(s)/Mail Date 11/6/2006
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date \_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-8 are rejected under 35 U.S.C. 102(b) as being anticipated by Young et al. (US Patent No. 4,528,470).

With regards to claim 1, the patent to Young et al. discloses an electric motor (11, Col. 2, Line 44) having a cylindrical housing (appears to be cylindrical in Figures 1 through 6 ) supporting the stator (12, Col. 2, Line 44, See Figure 1) and a rotor (13, Col. 2, Line 44, See Figure 1) coupled to an output shaft (14, Col. 2, Line 45) for the rotational driving of a starter head (21,22, Col. 2, Lines 55-65) with the interposing of an epicyclic gearbox (16, Col. 2, Line 46), the said gearbox comprising: a ring gear (19, Col. 2, Line 53, See Figures 1 and 2) having an internally toothed cylindrical annular skirt (inner teeth of gear 19, See Figure 3), and a radial flange provided with a hole (26, See Col. 3, Lines 15-18, the member inherently has a hole, See Figure 3), and means of axial centering (support by planetary gear carrier 18, See Figures 1-3) of the said ring gear (19) in the support of the starter (Col. 2, Line 43, See Figure 1), characterized in that the ring gear (19) of the gearbox (16) has a first abutment face (16 is abut to 19,

Art Unit: 4175

See Figure 1) situated in the same plane as the connection interface between the support (18) and the housing (16, See Figure 1). As to the same plane, the ring gear 19 touched the same inner surface of gear box housing 16 as support 18 (See Figures 1 and 2)

With regards to claim 2, the patent to Young et al. discloses that the connection interface is delimited between a second abutment face (between 17 and 18) of the support (18) in axial abutment against a third abutment face (between 17 and 15) of the housing (16, See Figures 1 and 2).

With regards to claim 3, the patent to Young et al. discloses that the ring gear (19) comprises a collar (25) equipped with the first abutment face (between 25 and 27) coming into contact with the support (18, via 19 to 18).

With regards to claim 4, the patent to Young et al. discloses that the collar (25) projects from the skirt (See Figure 3) of the ring gear (19) in order to provide the centering of the housing (16) and ring gear (19) on the support (18, See Figures 1 and 2).

With regards to claim 5, the patent to Young et al. discloses that the ring gear (19) of the gearbox (16) is locked in axial translation by the said collar (25) and by a stop protrusion (via the inner wall of 16) on the housing (16, See Figures 1 and 2).

With regards to claim 6, the patent to Young et al. discloses that the centering collar (25) is moulded directly with the ring gear (19, See Figure 3). Since molded is defined as "To fit closely by following the contours of.", collar 25 is fitted directly with the ring gear 19.

With regards to claim 7, the patent to Young et al. discloses a starter head (21) provided with a driver (23), a control lever (the lever near label 24 that extends through housing 11 to driver 23 in Figure 1) in engagement with the driver (23) and a support (16, the frame of 16 extends to touch the lever mentioned) receiving a control lever (the lever is abut to frame 16, See Figure 1), and in that the ring gear (19) of the gearbox (16) comprises an extension (the extension that touches the lever arm) conformed so as to fulfill a function of articulation of the control lever (the abutment appears to act as a pivoting point for the lever, See Figure 1).

With regards to claim 8, the patent to Young et al. discloses a starter head (21) provided with a driver (23), a control lever (the lever near label 24 that extends through housing 11 to driver 23 in Figure 1) in engagement with the driver (23) and a support (16) receiving a control lever (See Figure 1), and in that the ring gear (19) of the gearbox (16) comprises an extension conformed as a male element engaged in a cavity (the extension that touches the lever arm, See Figure 1) in the support (16) receiving a control lever (See Figure 1).

***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Fukuzawa et al. (US Patent No. 7,284,523) and Givan (US Patent No. 4,573,364) shows the current state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Keith A. Coleman whose telephone number is 571-270-3516. The examiner can normally be reached on Monday through Friday between 5:30-3 Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrence Till can be reached on (571) 272-1280. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 4175

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terrence R Till/  
Supervisory Patent Examiner, Art Unit 4175

KAC  
/K. A. C./  
Examiner, Art Unit 4175